

IN THE CLAIMS

The claims have not been amended in the present response.

1. (Previously Presented) A communication method that is executed by a transmission unit and a reception unit, comprising:

packetizing one or more items of sporadically input data to accompany timing information representing respective input timings of the one or more items of sporadically input data, said timing information being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, a bit value equal to the first binary value represents a timing at which one of said items of sporadically input data is inputted to the transmission unit, and a bit value equal to the second binary value represents a timing at which no data is inputted to the transmission unit;

transmitting the packetized data along with the timing information from the transmission unit;

receiving the packetized data along with the timing information by the reception unit; and

outputting the packetized data as output data at timings based on the timing information from the reception unit, wherein, for each bit of the received timing information, when the bit value is equal to the first binary value, a corresponding item of the packetized data is outputted by the reception unit, and when the bit value is equal to the second binary value, no data is outputted by the reception unit, such that respective timings of the output data correspond to said respective input timings of the sporadically input data.

2. (Original) A communication method according to claim 1, wherein the sporadically input data correspond to MIDI data that are produced and input to the transmission unit in a sporadic manner.

3. (Previously Presented) A communication method according to claim 1, wherein the transmission unit transmits the packetized data along with the timing information to the reception unit via a network.

4. (Previously Presented) A communication system comprising:

a transmission unit for packetizing one or more items of sporadically input data to accompany timing information representing respective input timings of the one or more items of sporadically input data and for transmitting the packetized data along with the timing information corresponding thereto, said timing information being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, a bit value equal to the first binary value represents a timing at which one of said items of sporadically input data is inputted to the transmission unit, and a bit value equal to the second binary value represents a timing at which no data is inputted to the transmission unit; and

a reception unit for receiving the packetized data along with the timing information from the transmission unit,

wherein said reception unit outputs the packetized data as output data at timings based on the timing information such that, for each bit of the received timing information, when the bit value is equal to the first binary value, a corresponding item of the packetized data is outputted

by the reception unit, and when the bit value is equal to the second binary value, no data is outputted by the reception unit, and respective timings of the output data correspond to said respective input timings of the sporadically input data.

5. (Original) A communication system according to claim 4, wherein the sporadically input data correspond to MIDI data that are produced and input to the transmission unit in a sporadic manner.

6. (Previously Presented) A communication system according to claim 4, wherein the transmission unit transmits the packetized data along with the timing information to the reception unit via a network.

7. (Previously Presented) A transmission unit for use in a communication system performing packet communications, comprising:

an input device for sporadically inputting data;

a buffer memory for accumulating the sporadically input data, wherein the buffer memory is periodically initialized;

a timing data register for storing timing data, said timing data being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, when an item of said sporadically input data is inputted to the buffer memory, the timing data register stores the first binary value for said periodically-produced bit as a representation of the input timing of said item of

sporadically input data, and when no item of data is inputted to the buffer memory, the timing data register stores the second binary value for said periodically-produced bit; and a controller for periodically checking the timing data stored in the timing data register such that, when, for a given time interval, the bit value corresponding to one of the plurality of bits of the stored timing data is equal to the first binary value, the sporadically input data stored in the buffer memory are packetized and subjected to transmission along with the timing data in said time interval.

8. (Previously Presented) The transmission unit according to claim 7, wherein the given time interval corresponds to a packet timing that occurs by a prescribed number of shift timings in correspondence with the plurality of bits forming the timing data.

9. (Previously Presented) The transmission unit according to claim 7, wherein the timing data register is a shift register for storing said plurality of bits of the timing data.

10. (Original) The transmission unit according to claim 7, wherein the sporadically input data correspond to MIDI data that are produced and input in a sporadic manner.

11. (Previously Presented) The transmission unit according to claim 7, wherein the packetized data are subjected to transmission along with the timing data via a network.

12. (Previously Presented) A reception unit for use in a communication system performing packet communications, comprising:

a receiver for receiving, from a transmission unit, packetized data accompanied by timing data corresponding thereto, said packetized data including one or more items of data sporadically

inputted into said transmission unit and said timing data being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, a bit value equal to the first binary value represents a timing at which one of said items of the sporadically input data is inputted to the transmission unit, and a bit value equal to the second binary value represents a timing at which no data is inputted into the transmission unit;

a buffer memory for accumulating the packetized data received by the receiver;

a timing data register for storing the timing data received by the receiver; and

a controller for periodically processing the timing data such that, for each bit of the timing data, when the bit value of the timing data is equal to said first binary value, the item of packetized data corresponding thereto is read from the buffer memory and outputted, and when the bit value of the timing data is equal to said second binary value, no data is read from the buffer memory.

13. (Previously Presented) The reception unit according to claim 12, wherein the timing data register is a shift register for storing said plurality of bits of the timing data.

14. (Original) The reception unit according to claim 12, wherein the sporadically input data correspond to MIDI data that are produced and input to the transmission unit in a sporadic manner.

15. (Previously Presented) The reception unit according to claim 12, wherein the receiver receives from the transmission unit the packetized data along with the timing data via a network.

16. (Previously Presented) A computer-readable recording medium storing a communication program which when executed causes a computer to perform a transmission method for use in a communication system performing packet communications, said transmission method comprising:

sporadically inputting data;

accumulating the sporadically input data in a buffer memory that is periodically initialized;

storing timing data representing respective input timings of one or more items of the sporadically input data by a timing data register, said timing data being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, when an item of said sporadically input data is inputted to the buffer memory, the timing data register stores the first binary value for said periodically-produced bit as a representation of the input timing of said item of sporadically input data, and when no item of data is inputted to the buffer memory, the timing data register stores the second binary value for said periodically-produced bit;

periodically checking the timing data stored in the timing data register and, when, for a given time interval, the bit value corresponding to one of the plurality of bits of the stored timing data is equal to the first binary value, packetizing the sporadically input data stored in the buffer memory; and

transmitting the packetized data along with the timing data in said time interval.

17. (Previously Presented) The computer-readable recording medium according to claim 16, wherein the sporadically input data correspond to MIDI data that are produced and input in a sporadic manner.

18. (Previously Presented) The computer-readable recording medium according to claim 16, wherein the packetized data are subjected to transmission along with the timing data via a network.

19. (Previously Presented) A computer-readable recording medium storing a communication program which when executed causes a computer to perform a reception method for use in a communication system performing packet communications, said reception method comprising:

receiving, from a transmission unit, packetized data accompanied by timing data corresponding thereto, said packetized data including one or more items of data sporadically inputted into said transmission unit and said timing data being in the form of a plurality of bits, wherein:

each one of said plurality of bits is periodically produced and takes on either a first binary value or a second binary value that is different from the first binary value; and

for each periodically-produced bit, a bit value equal to the first binary value represents a timing at which one of said items of the sporadically input data is inputted to the transmission unit, and a bit value equal to the second binary value represents a timing at which no data is inputted into the transmission unit;

accumulating the received packetized data by a buffer memory;

storing the received timing data in a timing data register; and

outputting, as output data, the packetized data such that, for each bit of the timing data, when the bit value of the timing data is equal to said first binary value, the item of packetized data corresponding thereto is read from the buffer memory and outputted, and when the bit value of the timing data is equal to said second binary value, no data is read from the buffer memory.

20. (Previously Presented) The computer-readable recording medium according to claim 19, wherein the sporadically input data correspond to MIDI data that are produced and input in a sporadic manner.

21. (Previously Presented) The computer-readable recording medium according to claim 19, wherein the packetized data are received along with the timing data via a network.

22. (Previously Presented) The transmission unit according to claim 7, wherein the first binary value is "1" and the second binary value is "0".

23. (Previously Presented) The reception unit according to claim 12, wherein the first binary value is "1" and the second binary value is "0".